IN THE CLAIMS:

The claims have been amended as follows:

1. (Original) Method of negotiating parameters of an optimization algorithm during connection handover of a mobile station between radio network subsystems, comprising the steps of:

signaling from a source radio network subsystem to a core network or to a target radio network subsystem that said handover is required;

signaling from the core network or from the target radio network subsystem to the source radio network subsystem that said handover is to proceed; and

transmitting said parameters from said source radio network subsystem to said target radio network subsystem directly or via the core network without any need for renegotiating said parameters over an air interface between said mobile station and said target radio network subsystem.

- 2. (Original) The method of claim 1, wherein during initial establishment of said connection between the mobile station and the source radio network subsystem, the parameters may include various optional sets of parameters, only one of which is accepted by the source radio network subsystem, said method further comprising the step of storing all of said optional sets of parameters wherein said step of transmitting said parameter includes transmitting all of said optional sets of parameters.
- 3. (Original) Mobile telecommunications system including a core network (14) connected (Iu) to plural interconnected (Iur) radio network subsystems (11, 12) for communicating with a mobile

station (10) over an air interface (Uu), wherein a first one of said radio network subsystems (11) includes a source radio network controller (16) for signaling to said core network or to a target radio network controller (20) in a second one of said radio network subsystems (12) that a handover is required wherein a response thereto said core network or said target radio network subsystem signals the source radio network controller that said handover is to proceed, and wherein parameters are then transmitted from said source radio network controller to said target radio network controller directly or via the core network without any need for renegotiating said parameters over said air interface between said mobile station and said target radio network controller.

- 4. (Original) The system of claim 3, wherein during an initial negotiation of said parameters between the mobile station and the source radio network controller, said parameters include various optional sets of parameters, only one of which is accepted by the source radio network controller, wherein said various optional sets of parameters are stored by said source radio network controller for transmittal to said target radio network controller after said source radio network controller signals said target audio network controller that said handover is to proceed.
- 5. (New) A radio network subsystem (11) for communicating with a mobile station (10) over an air interface (UU), comprising a source radio network controller (16) for signaling to a core network (14) or to a target radio network controller (20) that a handover is required wherein in response thereto said core network or said target radio network subsystem signals the source

radio network controller that said handover is to proceed, said radio network subsystem further comprising means for transmitting algorithm parameters from said source radio network controller to said target radio network controller directly or via the core network without any need for renegotiating said parameters over said air interface between said mobile station and said target radio network controller.

- 6. (New) The radio network subsystem (11) of claim 5, wherein said source radio network subsystem negotiated said parameters with the mobile station prior to said handover and said parameters include communication protocol parameters between said mobile station and said radio network subsystems.
- 7. (New) The radio network subsystem of claim 5, wherein during an initial negotiation of said parameters between the mobile station and the source radio network controller, said parameters include various optional sets of parameters, only one of which is accepted by the source radio network controller, wherein said various optional sets of parameters are stored by said source radio network controller for transmittal to said target radio network controller after said source radio network controller signals said target radio network controller that said handover is to proceed.
- 8. (New) A mobile station (10) comprising means for communication with a radio network subsystem (11) for negotiating parameters over an air interface (UU), wherein said radio network subsystem (11) comprising a source radio network controller (16) for signaling to a core network (14) or to a target radio network controller (20) that a handover is required wherein in response

thereto said core network or said target radio network subsystem signals the source radio network controller that said handover is to proceed, said radio network subsystem further comprising means for transmitting algorithm parameters from said source radio network controller to said target radio network controller directly or via the core network without any need for renegotiating said parameters over said air interface between said mobile station and said target radio network controller.

- 9. (New) The mobile station (10) of claim 5, wherein said source radio network subsystem negotiated said parameters with the mobile station prior to said handover and said parameters include communication protocol parameters between said mobile station and said radio network subsystems.
- 10. (New) The radio network subsystem of claim 8, wherein during an initial negotiation of said parameters between the mobile station and the source radio network controller, said parameters include various optional sets of parameters, only one of which is accepted by the source radio network controller, wherein said various optional sets of parameters are stored by said source radio network controller for transmittal to said target radio network controller after said source radio network controller signals said target radio network controller that said handover is to proceed.
- 11. (New) The method of claim 1, wherein said source radio network subsystem negotiated said parameters with the mobile station prior to said handover and said parameters include communication protocol parameters between said mobile station and said radio network subsystems.

- 12. (New) The system of claim 3, wherein said source radio network subsystem negotiated said parameters with the mobile station prior to said handover and said parameters include communication protocol parameters between said mobile station and said radio network subsystems.
- 13. (New) The method according to claim 1, wherein said parameters result from exchange identification (XID) negotiations.
- 14. (New) The method according to claim 13, wherein said exchange identification (XID) negotiations are carried out by a packet data convergence protocol (PDCP).
- 15. (New) The system according to claim 3, wherein said parameters result from exchange identification (XID) negotiations.
- 16. (New) The system according to claim 15, wherein said exchange identification (XID) negotiations are carried out by a packet data convergence protocol (PDCP).
- 17. (New) The method according to claim 1, wherein said parameters include header compression (HC).
- 18. (New) The mobile telecommunications system according to claim 3, wherein said parameters include header compression (HC).
- 19. (New) The radio network subsystem according to claim 5, wherein said parameters result from exchange identification (XID)

negotiations and optionally said exchange identification (XID) negotiations are carried out by a packet data convergence protocol (PDCP).

20. (New) The radio network subsystem according to claim 5, wherein said parameters include header compression (HC).